### **CHANGES TO "POINT TO POINT"**

# Please make sure your PSAP manager, radio tech and anyone else that is involved with maintaining your radio channels sees this document.

On March 31, 2016, after many months of investigation, discussion and testing, the Technology Committee of the Iowa Statewide Interoperable Communications System Board approved a procedure statement aimed at eliminating interfering signals on 155.370Mhz, commonly known and "Point to Point". The following is text of the procedure statement.

<u>Procedure Statement for documenting and publishing procedure of adding DCS Tone 271 to Point to Point Frequency 155.370 MHz for noise mitigation, and to protect receivers from outside interference.</u>

WHEREAS, ISICSB established in Policy Statement 2015-04 that under their authority directs
Technology Committee to define (eligibility, usage, frequencies, squelch protection, emission types, etc.)
and list, license (as appropriate), publish on the ISICSB web site, and review every six months the lowa
Statewide Interoperability Channels.

Now therefore

IT IS THE ISICSB PROCEDURE of Policy 2015-04:

That the Iowa Statewide Interoperability Communications Systems Board (ISICSB) through the Technology Committee hereby documents and publishes this procedure of adding DCS Tone 271, to Point to Point Frequency 155.370 MHz as follows:

- 1. Effective as soon as possible, but no LATER than May 1, 2016, base stations in the State of Iowa operating on 155.370 MHz (Point to Point) shall be programmed to transmit DCS code 271 while transmitting.
- 2. Effective no EARLIER than May 1, 2016, base stations in the State of Iowa operating on 155.370 MHz (Point to Point) may be programmed to decode DCS code 271 while receiving transmissions.

Any questions about this procedure statement should be directed to Iowa Statewide Interoperability Coordinator (SWIC) at 515-725-6108 or SWIC@iowa.gov

#### **Frequently Asked Questions**

#### Q: What is the interference?

A: Most of the time, the interference is coming from the Nebraska State Radio System, specifically a station in Niobrara, Nebraska which is located on the Nebraska and South Dakota state line approximately 85 miles west-northwest of Sioux City. The frequency is listed as an alternate control channel which simply means it's possible near continuous transmissions can occur. PSAPs in the western parts of lowa hear the interference more often, however as "skip" starts to occur, PSAP's along the Mississippi have reported hearing the interference.

#### Q: Why does the ISICSB have this authority over Point to Point?

A: Point to Point used to be protected by the FCC for the use in which we use it. However several years ago, the FCC turned controlling authority for Point to Point to each state. Although the channel is not named specifically, Iowa Code 80.28 and 80.29 gives the ISICSB authority over interoperable channels

such as Point to Point. Furthermore, the ISICSB has passed much of this authority onto the Technology Committee.

#### Q: Why use DCS instead of normal CTCSS or PL tones?

A: We've found through testing the DCS (Digital Code Squelch) provided 100% protection while CTCSS (Continuous Tone Coded Squelch System) or PL tones allowed some of the interfering signal through.

#### Q: Will I have to update my FCC license?

A: No. You're only adding a coded squelch, not changing emission types or other parameters.

#### Q: Does this means Point to Point will be digital?

A: No. Point to Point will continue to be analog, but will use a digital code squelch.

#### Q: How much will this change cost?

A: The cost typically shouldn't be more than \$200. The procedure is a simple programming change to your Point to Point base radio. Of course, your tech may find other issues unrelated to the programming change for which you may be billed extra for.

## Q: Why is encoding DCS 271 on transmissions mandatory, but decoding not mandatory on receive?

A: There are some PSAP's who may want to continue to receive stations (such as in Missouri or Minnesota) that don't use DCS 271. This gives them that option of being able to continue to receive those PSAPs, but they will also continue to receive the interference. Encoding DCS 271 on transmit is mandatory simply because if the PSAP has DCS 271 decoded on their receiver, they won't hear you if you don't encode DCS 271 on transmit. Your radio tech can further explain it to you.

## Q: What does the interference sound like? We sometimes hear static a lot on Point to Point but thought that was something else.

A: Static is exactly what it sounds like. If you are hearing static that comes and goes on Point to Point, then you are hearing the interference.

#### Q: Can't the FCC fix it?

A: Not really. The frequency is properly licensed, was properly coordinated and has been operational for a couple of years. Since we're currently using the frequency without any type of protection (CTCSS or DCS), the first advice from the FCC would be to do exactly what we are doing.

#### Q: What are surrounding states doing?

A: As far as we've been able to determine, the only surrounding states that use Point to Point like we do is Missouri and Minnesota. Minnesota has moved most of their PSAP to PSAP radio traffic to their statewide ARMER System, but has put CTCSS on Point to Point. Missouri PSAPs along the lowa border are considering the same efforts we are.

#### Q: Is this mandatory?

A: Yes, if you want to continue to use and benefit from the Point to Point channel, then you need to follow the procedure statement.

#### Q: Will this fix the problem?

A: Obviously, we certainly hope so. For many years, Point to Point has been operating in carrier squelch mode, which means there was no squelch protection whatsoever. This meant we hear distant signals when the "skip" was up. As the radio spectrum gets more and more crowded, protections such as CTCSS and DCS are going to be more and more commonplace as others use the same frequency, and sometimes for different purposes. This procedure will keep Point to Point useful in lowa for many more years to come.